

Reperfusion rate type as bilateral Pomeroy tubal ligation performed during caesarian sections

Abstract

In the present article, we present the post-surgery contraceptive effect of Pomeroy ligation technique. The technique was applied bilateral on 130 patients in due course of cesarean section. The patients have been followed at 6 month, 1, 2 and 3 years after the surgery. About 99% of the patients had successfully pass through Pomeroy technique, without any complications after only 6 month of follow up, and being able not to use any contraceptive methods. Only one case (1%) presented a technique failure. In the next 6 months of follow up, the patient presented an intrauterine pregnancy without using any contraceptive method. The application of Pomeroy ligation technique allow identification of tubal ends after splitting the loop increases the chance of success of the procedure and pathological examination of parts sent certifies the correct technique.

Keywords: cesarean section, surgery, Pomeroy ligation, tubal, contraceptive

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Introduction

Intention to perform surgical sterilization through tubal ligation has been shown since 1823, when Blundell proposed tubal ligation as a means of sterilization to the Medical Society of London⁽¹⁾. Since then, tubal ligation techniques have evolved permanently, practically now performing laparoscopic (silicone or titanium clips) or hysteroscopic, in order to minimize surgical stress and post-intervention recovery time. Approximately half of the tubal sterilization procedures are performed during cesarean surgery or immediately after birth (i.e. puerperal sterilization)^(2,3).

Another important aspect is given to a better consultancy of the couples before surgery, which will reduce the chance of regret. Therefore, tubal sterilization is usually conducted during cesarean section, having an important aim in reducing the unplanned future pregnancies and maternal mortality^(4,5).

We believe that tubal ligation technique type Pomeroy is a safe surgical sterilization during cesarean section, both in technique facility, lower failure rates and the safety of hemostasis after technique⁽⁶⁾.

In the present article, we present the post-surgery contraceptive effect of Pomeroy ligation technique in due course of cesarean section patients.

Methods

The study was made on a group of 130 patients which has been practiced bilateral Pomeroy tubal ligation type during cesarean section. Outpatients were reviewed after 6 months, 1 year, 2 years, 3 years after cesarean section and tubal ligation, those having regular sexual activity in that range, without the use of other methods

of contraception.

Results

From the total of 130 patients, it was noted only one single case (1%) of technique failure. The patient was presented in a 7-8 weeks of pregnancy with an intrauterine pregnancy. The specificity of the case was that the patient was positive for human immunodeficiency virus. After prior counseling, the patient decided to keep the pregnancy. She was monitored for up to 38 weeks, when she born by caesarean sections a living single fetus, male, weight-3300g, Apgar score 10. At the salpingal inspection, a fistula trace was found at the left salping, approximately 1 cm below the ligation area. The fistulae assumed the reperfusion of both salpingian heads at about 1cm below the ligation. During cesarean surgery, we practiced left partial salpingectomy, removing the fistula.

The patient was subsequently examined periodically (i.e. at 6 months, 1 year, 2 years, 3 years), and after 1 year of follow up, the patient could have regular sexual activity without using another contraceptive methods.

The rest of the patients (99%) had normal cesarean sections and the ligation technique was successfully. After only 6 months of follow-up, the patients were able not to use any contraception methods.

Discussion

A rapid population increase was seen in the last decades in many developing countries, leading to pregnancies risk. This issue could sometimes be solving by using effective contraceptive methods, like surgical sterilization⁽⁷⁾. From many known bilateral tubal ligation

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methods, the most applied was those described by Pomeroy in 1929. After 1970s, this method have been started to be used more often⁽⁸⁾. In the same context, this kind of sterilization was showed to become more safe and secure, reducing the morbidity rate at 1-6%⁽⁹⁾.

In the United States, sterilization during cesarean surgery remains the main method of surgical sterilization in patients who are under medical conditions care who do not want to procreate⁽¹⁰⁾.

In a two years study, the incidence of laparoscopic post-insertion load of a silicone clip was 0.017 (1.7%) versus postpartum salpingectomy where the rate of pregnancy was 0.004 (0.4%)⁽¹¹⁾.

Developing pregnancy rate in our study was approximately 0.76%, it was in the safety range taking into account the salpingian swelling and hypertrophy during pregnancy. Similar rates have been reported by other studies⁽¹²⁾.

The risk of failure of the procedure should be discussed with each patient, explaining that in about one third of the cases that pregnancy could develop extrauterine.

Moreover, the lower failure rates were obtained from patients who practiced the partial salpingectomy literature reporting the average failure rate of 0.63% to 5 and 0.75% to 10 years^(13,14).

Conclusions

Pomeroy tubal ligature technique represent a safe technique of surgical sterilization during cesarean surgery. Identification of tubal ends after splitting the loop increases the chance of success of the procedure and pathological examination of parts sent certifies the correct technique. ■

Conflict of interests: The authors declare no conflict of interests.

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